



# GPS L5

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GPS Modernization Industry Days  
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# Background

- 1996 - GPS Presidential Decision Directive (PDD)
  - Comprehensive national policy on GPS and augmentations
  - Interagency GPS Executive Board (IGEB) established
- February 1997 - Department of Defense (DoD) and Department of Transportation (DoT) agree to provide a second civil GPS frequency
- March 1998 - VP Gore announces IGEB decision to implement two new civil signals
- January 1999 - VP Gore announces third civil signal frequency selection - 1176.45 MHz

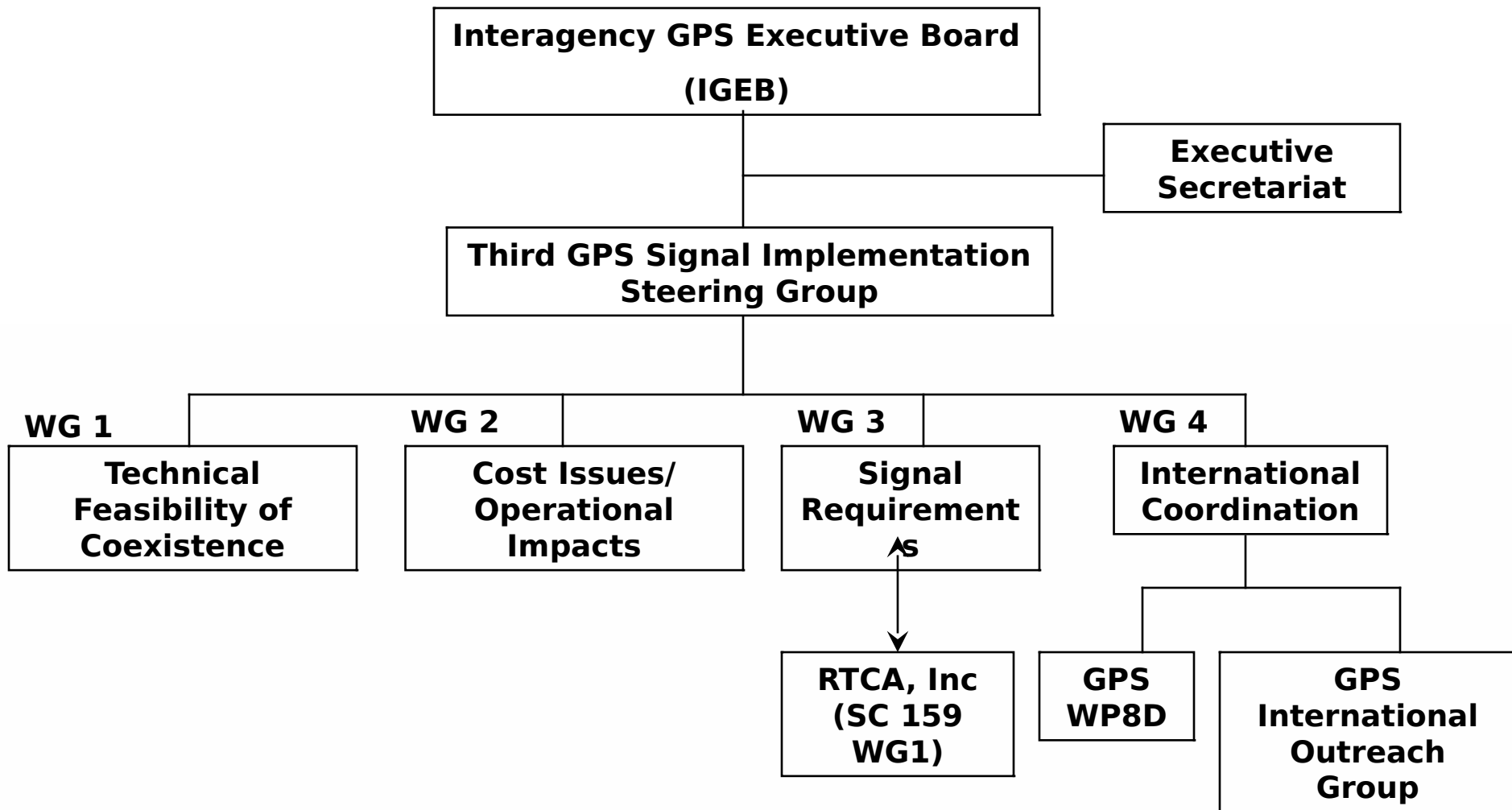


# Background (continued)

- February 1999 - IGEB Third Civil Signal Implementation Steering Group formed
  - Established relationship between IGEB and RTCA for development of L5 signal requirements
- November 1999 - IGEB report *Implementation of a Third Civil GPS Signal* completed
  - Recommended implementing L5 with:
    - 6 dB higher minimum received signal power than L1 C/A code
    - 10.23 Mchip/second spreading codes on quadrature channels (no data on one channel)
  - Other recommendations regarding coexistence of L5 with existing systems operating at/near 1176.45 MHz
    - Link 16
    - Distance Measuring Equipment (DME)/Tactical Air Navigation (TACAN)



# Feb. - Nov. '99 IGEB Organization



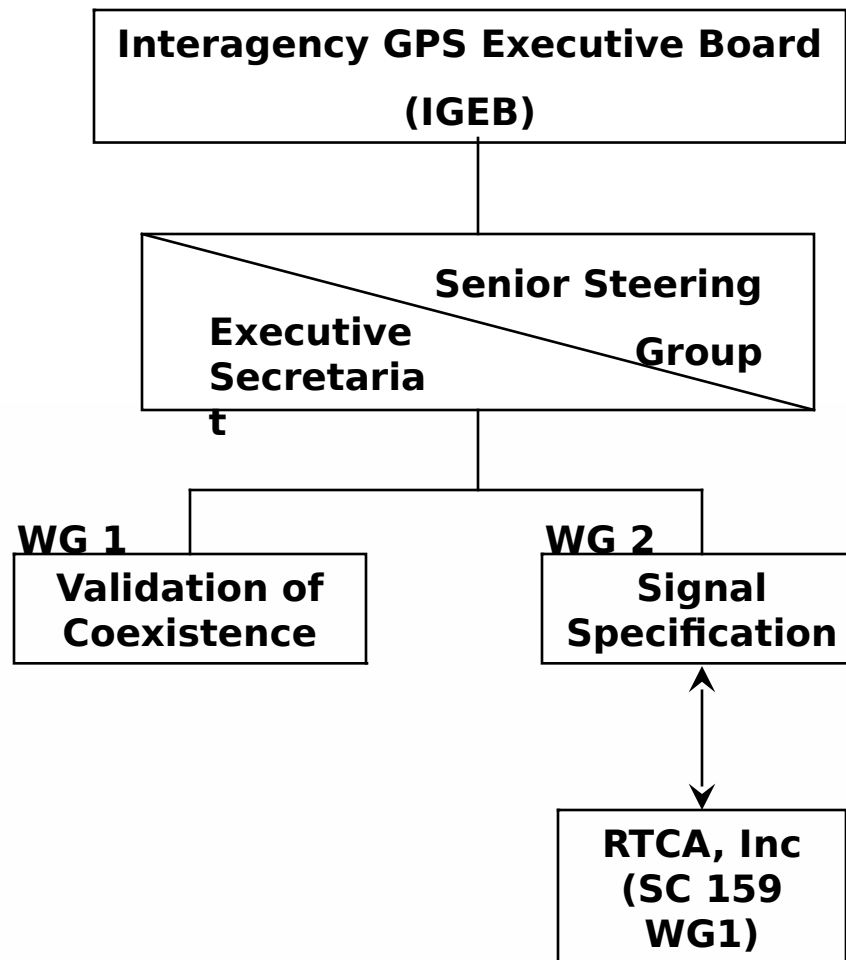


# Current IGEB L5 Activities

- Working Group 1 -Validation of Coexistence
  - Addresses follow-on work recommendations from Nov. 1999 IGEB report
  - Co-chaired by Dr. Hegarty (FAA)/Mr. Williams (JSC)
- Working Group 2 – L5 Signal Specification
  - Chaired by Dr. Hegarty (FAA)



# Present IGEB Organization





# L5 Signal Specification Schedule

- April 1 - “Best” technical draft specification to GPS JPO
- May 16 - Draft signal specification will be mailed for ballot vote
- June 16 - SC159 Plenary vote
- Late summer - Next RTCA Program Management Committee (PMC) meeting (PMC approval necessary for RTCA publication)
- Dec. - IGEB approved specification to JPO for definitized contract